Exercises

E9.71 [OSB] Prerequisites: [OQR]. Show that the set $A \subset \mathbb{R}$ defined by

$A = \{0\} \cup \{1/n \ \colon n \in \mathbb{N}, n \geq 1\} \cup \{1/n+1/m \ \colon n, m \in \mathbb{N}, n \geq 1, m \geq 1,$

is compact; identify its accumulation points.

Solution 1. [osc]